

Storm Data and Unusual Weather Phenomena - February 2011

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	----------------------	------------------------	------------------------

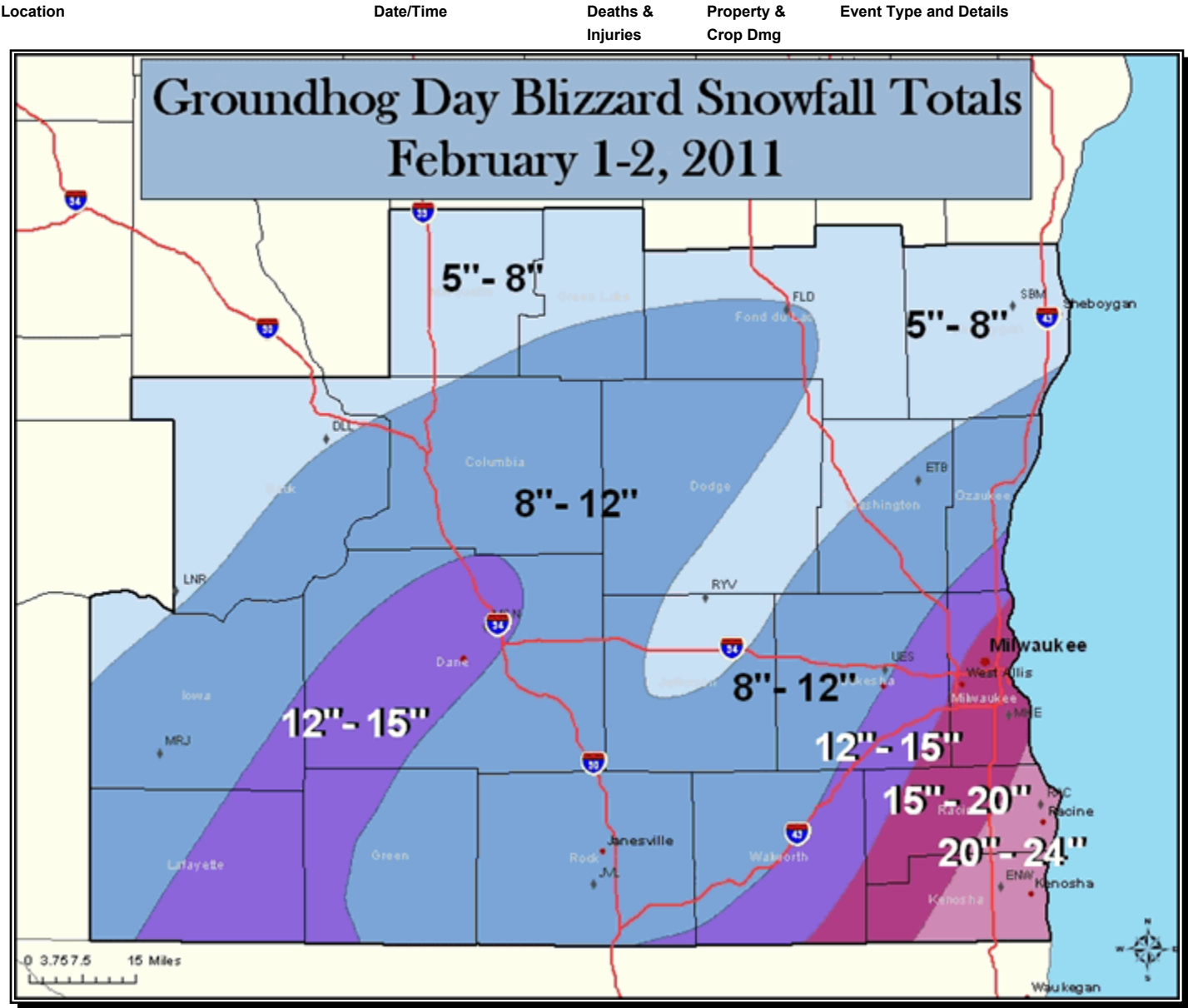
WISCONSIN, Southeast

(WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK

02/01/11 17:00 CST	0	Blizzard
02/02/11 05:00 CST	0	

A powerful low pressure center, passing south of Wisconsin, produced blizzard conditions across much of southern Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the evening. Very strong winds were associated with this storm for an extended period of time. Sustained winds of 30 to 40 mph were common through the event, with peak wind gusts between 45 and 55 mph. The combination of high winds and heavy snow created whiteout conditions with visibilities falling to near zero. Twenty-four hour snowfall totals were between 14 and 15 inches. In addition to the blizzard, several inches of snow fell on Jan 31. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of February 2nd. Many cooperative observer stations set records for multi-day snowfall totals. Beloit tied a record with a one-day (2/1) snowfall of 15 inches, is tied for second place with two-day (1/31-2/1) total of 17.0 inches and tied for fifth with a three-day (1/31-2/2) snowfall of 17.0 inches. Snow drifts of 3 to 8 feet were common, with reports of some drifts reaching 12 to 15 feet in open rural areas. Many area school districts dismissed classes early on February 1st, and remained closed on the 2nd and 3rd. A Civil Danger Warning was issued by Wisconsin Emergency Management concerning the dangerous driving conditions. Interstate 43 from Beloit to Mukwonago was closed, as well as portions of Interstate 90, with many stranded motorists having to be rescued from vehicles buried in the drifting snow. About 100 National Guardsman were mobilized statewide in response to Gov. Scott Walker's emergency declaration for 29 counties to help rescue motorists and run emergency shelters at armories. Rock County sheriff deputies had to abandoned their squad cars and jump into National Guard Humvees and Army trucks, which also got stuck in the deep drifts. Wisconsin DNR snowmobiles also became stuck in the deep snow. A 66-year old Janesville man was hospitalized for hypothermia after he fell and was subsequently buried by snow from a snow plow before being found by a neighbor a dug out of the snow bank 4 hours later. The blizzard conditions prevented firefighters from reaching a house fire in Gratiot (Lafayette County) until conditions improved enough for a plow to clear the road. The house was a total loss. Alliant energy reported 7,263 customers in the Milton-Edgerton area were without power at the height of the storm.

Storm Data and Unusual Weather Phenomena - February 2011



MXK CWA 24-Hour Snowfall Totals from 12AM February 1st to 12 AM February 2nd

(WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA				
	02/01/11 17:00 CST	1	20K	Blizzard
	02/02/11 07:00 CST		0	

Direct Fatalities: F52OU

A powerful low pressure center, passing south of Wisconsin, produced blizzard conditions across much of southern Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the evening. Very strong winds were associated with this storm for an extended period of time. Sustained northeast winds of 30 to 40 mph were common through the event, with peak wind gusts between 45 and 65 mph, with the stronger wind gusts near Lake Michigan. The lakeshore observation site at Kenosha reported a 64 mph wind gust at 120 am CST on February 2nd. The canopy over gas pumps at a gas station in the City of Kenosha was damaged by the high winds. The combination of high winds and heavy snow created widespread sustained visibilities of less than 1/4 mile, with frequent whiteout conditions and near zero visibilities. Twenty-four hour snowfall totals were between 20 and 26 inches, with 26 inches of snow measured in Pell Lake, and 24 inches recorded at both the Racine Wastewater Treatment Plant, a one-day record, and by a cooperative observer 4 miles southwest of the city of Kenosha. In addition to the snow that fell during the blizzard, several inches of snow fell on Jan 31, with light lake effect snow through the day on Feb 1st. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of

Storm Data and Unusual Weather Phenomena - February 2011

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	-------------------	---------------------	------------------------

February 2nd. Racine set new two-day (1/31-2/1) and three-day (1/31-2/2) record snowfalls with 26 inches for each period, and Kenosha also set new two-day (1/31-2/1) and three-day (1/31-2/2) record snowfalls with 25.3 inches and 27.3 inches respectively. Snow drifts of 4 to 12 feet were common, with reports of some drifts reaching up to 15 feet in open rural areas. A Civil Danger Warning was issued by Wisconsin Emergency Management concerning the dangerous driving conditions. Drifting snow closed Interstate 94 from the Illinois border north to Milwaukee and Interstate 43 from Beloit to Mukwonago with many stranded motorists having to be rescued from vehicles buried in the drifting snow. Several Kenosha County sheriff deputies had to be rescued from their squad cars on I-94 after being stranded for six and seven hours. About 100 National Guardsman were mobilized statewide in response to Gov. Scott Walker's emergency declaration for 29 counties to help rescue motorists and run emergency shelters at armories. The Racine Fire Department alone responded to 150 emergency calls related to the storm. Emergency rooms across Southeast Wisconsin reported dozens of heart attacks and injuries from snow blower accidents. A 52-year old Yorkville (Racine County) woman died from exposure after being dropped off by a tow truck driver at the foot of her driveway and became disoriented in the whiteout conditions. Her body was found 300 feet from her home. At the height of the storm, WE Energies reported 5,200 customers were without power across Southeast Wisconsin. An estimated \$1.4 million dollars was spent for snow removal in Racine County alone. Trucks dumped snow that had been cleared from area streets at Pershing Park, with snow piles reaching 60-70 feet high.

(WI-Z057) COLUMBIA, (WI-Z062) IOWA, (WI-Z063) DANE

02/01/11 19:00 CST	10K	Blizzard
02/02/11 04:00 CST	0	

A powerful low pressure center, passing south of Wisconsin, produced blizzard conditions across much of southern Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the evening. Very strong winds were associated with this storm for an extended period of time. Sustained winds of 30 to 40 mph were common through the event, with peak wind gusts between 45 and 50 mph. The combination of high winds and heavy snow created widespread sustained visibilities of less than 1/4 mile, with frequent whiteout conditions and near zero visibilities. Twenty-four hour snowfall totals were between 12 and 14 inches, with 14.5 inches of snow measured in Middleton, 12.7 inches recorded at Dane County Regional Airport, 12.2 inches in Portage and 12 inches in Mineral Point. In addition to the snow that fell during the blizzard, several inches of snow fell on Jan 31. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of February 2nd. Many cooperative observer stations set records for multi-day snowfall totals. Stoughton tied a record with a one-day (2/1) snowfall of 14 inches, and set new two-day (1/31-2/1) and three-day (1/31-2/2) record snowfalls with 19.1 inches for each period. Snow drifts of 3 to 6 feet were common, with reports of some drifts reaching 12 to 15 feet in open rural areas. Drifting snow closed county roads, with many stranded motorists having to be rescued from vehicles buried in the drifting snow. About 100 National Guardsman were mobilized statewide in response to Gov. Scott Walker's emergency declaration for 29 counties to help rescue motorists and run emergency shelters at armories. The blizzard led to early dismissals on February 1st at many area schools, and kept them closed through February 3rd. Snow drifted up to the roof of the Yahara Elementary School in De Forest (Dane County). The strong, gusty winds sheared off the sign at a Super 8 motel in Columbus in Columbia County.

(WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE

02/01/11 19:00 CST	0	Blizzard
02/02/11 07:00 CST	0	

A powerful low pressure center, passing south of Wisconsin, produced blizzard conditions across much of southern Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the late afternoon and evening. Very strong winds were associated with this storm for an extended period of time. Sustained northeast winds of 30 to 40 mph were common through the event, with peak wind gusts between 45 and 55 mph, with the stronger wind gusts near Lake Michigan. The lakeshore observation site at Milwaukee reported a 54 mph wind gust at 7 pm CST on February 1st. The combination of high winds and heavy snow created widespread sustained visibilities of less than 1/4 mile, with frequent whiteout conditions and near zero visibilities. Twenty-four hour snowfall totals were between 12 and 22 inches, with 22 inches of snow measured in Hales Corners (Milwaukee County), 18 inches recorded 4 miles southwest of Muskego (Waukesha County) and 12.1 inches at the NWS office in Sullivan (Jefferson County). Snowfall totaled 16.1 inches at Mitchell International Airport, which tied for the 5th greatest 24-hour snowfall total in Milwaukee. Most flights in and out of the airport were canceled until later in the day on February 2nd. In addition to the snow that fell during the blizzard, several inches of snow fell on Jan 31, with light lake effect snow through the day on Feb 1st. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of February 2nd. Many cooperative observer stations set records for multi-day snowfall totals. Whitnall Park in Hales Corners (Milwaukee County) set a record with 28 inches of snow from January 31st through February 1st. Snow drifts of 3 to 12 feet were common, with reports of some drifts reaching 12 to 15 feet in open rural areas. A Civil Danger Warning was issued by Wisconsin Emergency Management concerning the dangerous driving conditions. Drifting snow closed Interstate 94 from the Illinois border north to Milwaukee, and Interstate 43 from Beloit to Mukwonago, with many stranded motorists having to be rescued from vehicles buried in the drifting snow. About 100 National Guardsman were mobilized statewide in response to Gov. Scott Walker's emergency declaration for 29 counties to help rescue motorists and run emergency shelters at armories. Most businesses, several restaurants and all of the Milwaukee-area shopping malls were closed for at least part of the day on February 2nd. The blizzard even caused the Milwaukee County Zoo to cancel the annual Groundhog Day festivities. Emergency rooms across Southeast Wisconsin reported dozens of heart attacks and injuries from snow blower accidents. Three Milwaukee area men, two with heart problems, died while shoveling snow.

Storm Data and Unusual Weather Phenomena - February 2011

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	-------------------	---------------------	------------------------

Milwaukee area law enforcement reported 24 vehicle accidents, with two injuries and 47 disabled vehicles. Jefferson County reported 1 injury due to a vehicle accident, with a total of 122 weather related calls. At the height of the storm, WE Energies reported 5,200 customers were without power across Southeast Wisconsin.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z056) SAUK

02/01/11 21:00 CST	0	Winter Storm
02/02/11 03:00 CST	0	

A powerful low pressure center, passing south of Wisconsin, produced near blizzard conditions across portions of South Central Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the late afternoon and evening. Very strong winds were associated with this storm for an extended period of time. Sustained northeast winds of 25 to 30 mph were common through the event, with occasional gusts between 40 and 45 mph. The combination of gusty winds and heavy snow created widespread visibilities of a mile or less, with law enforcement reporting near-blizzard conditions at times. Twenty-four hour snowfall totals were between 4 and 8 inches, with 8 inches of snow measured by a cooperative observer 1 mile northeast of Baraboo (Sauk County); 5 inches at Markesan (Green Lake County) and 4.9 inches in Montello (Marquette County). In addition to the snow that fell during the blizzard, several inches of snow fell on Jan 31. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of February 2nd. Snow drifts of 1 to 3 feet were common.

(WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE

02/01/11 21:30 CST	0	Blizzard
02/02/11 06:00 CST	0	

A powerful low pressure center, passing south of Wisconsin, produced blizzard conditions across much of southern Wisconsin from the evening hours of Tuesday, February 1st into the early morning of Wednesday, February 2nd. Snow associated with the system began in the mid-afternoon hours of February 1st in far southern Wisconsin and became heavy as it pushed northward into the state through the late afternoon and evening. Very strong winds were associated with this storm for an extended period of time. Sustained northeast winds of 30 to 40 mph were common through the event, with peak wind gusts between 45 and 55 mph, with the stronger wind gusts near Lake Michigan. The lakeshore observation site at Sheboygan reported a 55 mph wind gust at 6 pm CST on February 1st. The combination of high winds and heavy snow created widespread sustained visibilities of less than 1/4 mile, with frequent whiteout conditions and near zero visibilities. Twenty-four hour snowfall totals were between 8 and 16 inches, with 16 inches of snow measured by a cooperative observer 1 mile southwest of West Bend (Washington County); 11.5 inches near Beaver Dam in the town of Westfield (Dodge County); 9.5 inches just southwest of the city of Sheboygan; 8.5 inches in Grafton (Ozaukee County); and 8 inches 2 miles southwest of Fond Du Lac. In addition to the snow that fell during the blizzard, several inches of snow fell on Jan 31, with light lake effect snow through the day on Feb 1st. It's possible that some locations did not see a break in snowfall between the evening of January 31st and the morning of February 2nd. Snow drifts of 3 to 10 feet were common, with reports of some drifts reaching 12 to 15 feet in open rural areas. Drifting snow closed county highways and roads with many stranded motorists having to be rescued from vehicles buried in the drifting snow. About 100 National Guardsmen were mobilized statewide in response to Gov. Scott Walker's emergency declaration for 29 counties to help rescue motorists and run emergency shelters at armories. Dodge County law enforcement reported 174 vehicles were stuck in snow or had skidded off area roads. A Randolph (Dodge County) man injured his hand in a snow blower incident. At the height of the storm, WE Energies reported 5,200 customers were without power across Southeast Wisconsin.

(WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE

02/06/11 06:00 CST	0	Winter Weather
02/06/11 14:00 CST	0	

Forcing from an upper level disturbance produced a band of moderate snow over parts of South Central and Southeast Wisconsin and left behind accumulations of 3 to 5.5 inches within a 7 to 8 hour period. The core of the band extended from the Monroe area in Green County, northeast to the City of Milwaukee. Media outlets reports dozens of vehicle accidents. Maximum snow accumulations included 5.5 inches at Palmyra 1.2 SW (Jefferson Co.), 5.0 inches at Orfordville (Rock Co.) and Mukwonago (Waukesha Co.), 4.5 inches in East Troy (Walworth Co.), 4.0 inches in Brodhead (Green Co.), and 3.7 inches at both Milwaukee Mitchell Field (Milwaukee Co.) and Waterford (Racine Co.).

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z068) GREEN, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA

02/18/11 13:00 CST	30K	Strong Wind (MAX 39 kt)
02/18/11 18:00 CST	0	

A tight pressure gradient around strong low pressure over James Bay, 3-hourly pressure rises of 2 to 4 mb, and daytime mixing up to 925 mb winds of 35 to 45 knots produced strong gusty winds that affected parts of South Central and Southeast Wisconsin with sustained winds of 26 to 29 knots (30 - 33 mph) and gusts to 39 knots (45 mph). Scattered power-outages were noted by the media as

Storm Data and Unusual Weather Phenomena - February 2011

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	-------------------	---------------------	------------------------

old tree branches fell onto power lines. The responsible low pressure moved east across the northern part of Lake Superior which allowed strong west winds to affect parts of Wisconsin.

(WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE

02/20/11 08:00 CST	0	Winter Storm
02/20/11 11:30 CST	0	

Surface low pressure tracked from eastern Iowa to just south of Chicago producing a winter storm with a mixed-bag of precipitation types and wind gusts of 22 to 33 knots (25 to 34 mph) that affected South Central and Southeast Wisconsin from February 20th into early February 21st. Visibilities were reduced to around 1/2 mile. Only those counties bordering Illinois escaped the storm. The counties of Iowa, Dane, Jefferson, Waukesha, and Milwaukee picked up about 1/4 inch of ice due to freezing rain, and followed this with 1/2 to 1 inch of sleet and then light snow of 1/2 to 1.5 inches. Maximum sleet and snow accumulations were 2 inches in Mazomanie (Dane Co.), 3.0 inches in Watertown (Jefferson Co.), 5.4 inches in Merton (Waukesha Co.), and 7.2 inches in Brown Deer (Milwaukee Co.). The precipitation north of these counties was mostly snow.

(WI-Z056) SAUK, (WI-Z057) COLUMBIA

02/20/11 08:00 CST	0	Winter Storm
02/20/11 23:30 CST	0	

Surface low pressure tracked from eastern Iowa to just south of Chicago producing a winter storm with a mixed-bag of precipitation types and wind gusts of 22 to 33 knots (25 to 34 mph) that affected South Central and Southeast Wisconsin from February 20th into early February 21st. Visibilities were reduced to around 1/2 mile. Only those counties bordering Illinois escaped the storm. The counties of Sauk and Columbia picked up 1/2 to 1 inch of sleet followed by several inches of snow. Maximum snow and sleet accumulations were 3 to around 7 inches, with the lower amounts in the southern portions of these counties. The greatest totals were 7.3 inches in Portage (Columbia Co.) and 7 inches in La Valle (Sauk Co.). The precipitation north of these counties was mostly snow while south of these counties most of the precipitation was freezing rain and sleet.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE

02/20/11 08:00 CST	0	Winter Storm
02/21/11 03:55 CST	0	

Surface low pressure tracked from eastern Iowa to just south of Chicago producing a winter storm with a mixed-bag of precipitation types and wind gusts of 22 to 33 knots (25 to 34 mph) that affected South Central and Southeast Wisconsin from February 20th into early February 21st. Visibilities were reduced to around 1/2 mile. Only those counties bordering Illinois escaped the storm. The counties of Marquette, Green Lake, Fond du Lac, Sheboygan, Dodge, Washington, and Ozaukee had mostly snow, but did get a touch of sleet. Maximum snow accumulations ranged from 6 inches to 13 inches. Specifically, maximum accumulations in each county include 10 inches across extreme northern Marquette and Green Lake counties, 9 inches just east of the city of Fond du Lac in St. Peters, 14 inches in Ootsburg (Sheboygan Co.), 7.5 inches in the Beaver Dam area, 10.2 inches in Jackson (Washington Co.), and 12 inches in Belgium (Ozaukee Co.). The precipitation south of these counties consisted of more freezing rain and sleet with much lesser amounts of snow.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA

02/21/11 15:00 CST	0	Winter Weather
02/22/11 06:00 CST	0	

A long-duration snow affected all of South Central and Southeast Wisconsin from the afternoon hours of February 21st to almost daybreak February 22nd. Just prior to the snow, light freezing drizzle glazed untreated roads and other surfaces. There was some lake-enhancement of the snow in those areas near Lake Michigan. The media noted dozens of vehicle accidents. Maximum snow accumulations include 2.5 inches in Marquette Co., 3.5 inches in Green Lake Co., 4.5 inches in Fond du Lac and Sheboygan counties, around 2 inches in Sauk Co., 3 inches in Columbia Co., 4 inches in Dodge Co., 5.9 inches in Washington Co., 7.5 inches in Ozaukee Co., about 2 inches in Iowa Co., 2.5 inches in Dane Co., 3.4 inches in Jefferson Co., 6.4 inches in Waukesha Co., 6 inches in Milwaukee Co., 1.5 inches in Lafayette Co., 2 inches in Green Co., 3 inches in Rock Co., 2.5 inches in Walworth Co., 4 inches in Racine Co., and 3 inches in Kenosha Co. The snow and freezing rain was related to forcing with an upper-level low pressure which moved from Minnesota southeast across southern Wisconsin along with convergence along an inverted surface trough that extended across southern Wisconsin.